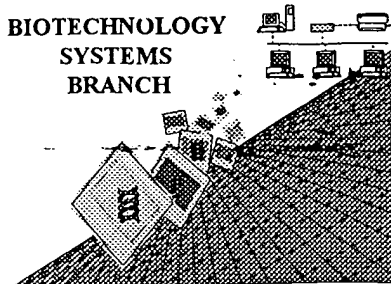


0400

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

09/641,931

Source:

OIPE

Date Processed by STIC:

8/29/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY
EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT
COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY
or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT,
WITH A NOTICE TO COMPLY

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER,
703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October-1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

OIPE

pp 1-5

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/641,931

DATE: 08/29/2000
 TIME: 12:54:49

Input Set : A:\ES.txt
 Output Set: N:\CRF3\08292000\I641931.raw

**Does Not Comply
 Corrected Diskette Needed**

3 <110> APPLICANT: PHENOGENE THERAPEUTIQUES INC.
 5 <120> TITLE OF INVENTION: NUCLEIC ACID MOLECULE, METHOD AND KIT FOR SELECTING A NUCLEIC ACID HAVING
 6 A DESIRED FEATURE
 8 <130> FILE REFERENCE: 29313-001
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/641,931
 C--> 10 <141> CURRENT FILING DATE: 2000-08-18
 10 <160> NUMBER OF SEQ ID NOS: 32
 12 <170> SOFTWARE: PatentIn version 3.0
 14 <210> SEQ ID NO: 1
 15 <211> LENGTH: 24
 16 <212> TYPE: DNA
 17 <213> ORGANISM: artificial sequence
 W--> 19 <220> FEATURE:
 W--> 19 <223> OTHER INFORMATION: *insert these mandatory keyword identifiers*
 19 <400> SEQUENCE: 1 *wherever C2137*
 20 ggatccaata gaggattctt taac *response is Unknown*
 23 <210> SEQ ID NO: 2 *or Artificial Sequence*
 24 <211> LENGTH: 21
 25 <212> TYPE: DNA
 26 <213> ORGANISM: artificial sequence
 W--> 28 <220> FEATURE:
 W--> 28 <223> OTHER INFORMATION:
 28 <400> SEQUENCE: 2
 29 tcaccactct tctgtccctt c
 32 <210> SEQ ID NO: 3
 33 <211> LENGTH: 25
 34 <212> TYPE: DNA
 35 <213> ORGANISM: artificial sequence
 W--> 37 <220> FEATURE:
 W--> 37 <223> OTHER INFORMATION:
 37 <400> SEQUENCE: 3
 38 ggatcctacg aacatgacgac cactg
 41 <210> SEQ ID NO: 4
 42 <211> LENGTH: 21
 43 <212> TYPE: DNA
 44 <213> ORGANISM: artificial sequence
 W--> 46 <220> FEATURE:
 W--> 46 <223> OTHER INFORMATION:
 46 <400> SEQUENCE: 4
 47 tcattctcgt gtgctagtca g
 50 <210> SEQ ID NO: 5
 51 <211> LENGTH: 30
 52 <212> TYPE: DNA
 53 <213> ORGANISM: artificial sequence
 W--> 55 <220> FEATURE:
 W--> 55 <223> OTHER INFORMATION:
 55 <400> SEQUENCE: 5

RAW SEQUENCE LISTING

DATE: 08/29/2000

PATENT APPLICATION: US/09/641,931

TIME: 12:54:49

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292000\I641931.raw

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56 agcgaattcg tcctgtggac agatcactgc 30
59 <210> SEQ ID NO: 6
60 <211> LENGTH: 30
61 <212> TYPE: DNA
62 <213> ORGANISM: artificial sequence
W--> 64 <220> FEATURE:
W--> 64 <223> OTHER INFORMATION:
64 <400> SEQUENCE: 6
65 gctctcgagg aaggcacagc tgctttccac 30
68 <210> SEQ ID NO: 7
69 <211> LENGTH: 30
70 <212> TYPE: DNA
71 <213> ORGANISM: artificial sequence
W--> 73 <220> FEATURE:
W--> 73 <223> OTHER INFORMATION:
73 <400> SEQUENCE: 7
74 cttctcgagc agtttaaacy tgagcttccc 30
77 <210> SEQ ID NO: 8
78 <211> LENGTH: 30
79 <212> TYPE: DNA
80 <213> ORGANISM: artificial sequence
W--> 82 <220> FEATURE:
W--> 82 <223> OTHER INFORMATION:
82 <400> SEQUENCE: 8
83 acgtctagat catcttcgtg tgctagtcag 30
86 <210> SEQ ID NO: 9
87 <211> LENGTH: 47
88 <212> TYPE: DNA
89 <213> ORGANISM: artificial sequence
W--> 91 <220> FEATURE:
W--> 91 <223> OTHER INFORMATION:
91 <400> SEQUENCE: 9
92 tcgagcagat ctgcagcacc actggtcacg gcaatgtgtc ggagcgg 47
95 <210> SEQ ID NO: 10
96 <211> LENGTH: 43
97 <212> TYPE: DNA
98 <213> ORGANISM: artificial sequence
W--> 100 <220> FEATURE:
W--> 100 <223> OTHER INFORMATION:
100 <400> SEQUENCE: 10
101 ccgctccgac acattgccgt gaccagtggg gctgcagatc tgc 43
104 <210> SEQ ID NO: 11
105 <211> LENGTH: 63
106 <212> TYPE: DNA
107 <213> ORGANISM: artificial sequence
W--> 109 <220> FEATURE:
W--> 109 <223> OTHER INFORMATION:
109 <400> SEQUENCE: 11
110 gtgtccaagc catcagaggg gaaataaagc atctctacgg tggtcctaaa tagtcagcat 60

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/641,931

DATE: 08/29/2000
 TIME: 12:54:49

Input Set : A:\ES.txt
 Output Set: N:\CRF3\08292000\I641931.raw

```

112 agt
115 <210> SEQ ID NO: 12
116 <211> LENGTH: 28
117 <212> TYPE: DNA
118 <213> ORGANISM: artificial sequence
W--> 120 <220> FEATURE:
W--> 120 <223> OTHER INFORMATION:
120 <400> SEQUENCE: 12
121 ccagagctca tgcggaccac tcttctgt
124 <210> SEQ ID NO: 13
125 <211> LENGTH: 24
126 <212> TYPE: DNA
127 <213> ORGANISM: artificial sequence
W--> 129 <220> FEATURE:
W--> 129 <223> OTHER INFORMATION:
129 <400> SEQUENCE: 13
130 tcgcgattta aattaattaa gctt
133 <210> SEQ ID NO: 14
134 <211> LENGTH: 24
135 <212> TYPE: DNA
136 <213> ORGANISM: artificial sequence
W--> 138 <220> FEATURE:
W--> 138 <223> OTHER INFORMATION:
138 <400> SEQUENCE: 14
139 aagcttaatt aatttaaattc gcga
142 <210> SEQ ID NO: 15
143 <211> LENGTH: 18
144 <212> TYPE: DNA
145 <213> ORGANISM: artificial sequence
W--> 147 <220> FEATURE:
W--> 147 <223> OTHER INFORMATION:
147 <400> SEQUENCE: 15
148 agacgcgtag atctcacc
151 <210> SEQ ID NO: 16
152 <211> LENGTH: 20
153 <212> TYPE: DNA
154 <213> ORGANISM: artificial sequence
W--> 156 <220> FEATURE:
W--> 156 <223> OTHER INFORMATION:
156 <400> SEQUENCE: 16
157 gatccgcacc gcaatatggc
160 <210> SEQ ID NO: 17
161 <211> LENGTH: 25
162 <212> TYPE: DNA
163 <213> ORGANISM: artificial sequence
W--> 165 <220> FEATURE:
W--> 165 <223> OTHER INFORMATION:
165 <400> SEQUENCE: 17
166 tctagagatg cattatgcac atcag

```

63
28
24
24
18
20
25

RAW SEQUENCE LISTING

DATE: 08/29/2000

PATENT APPLICATION: US/09/641,931

TIME: 12:54:49

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292000\I641931.raw

```

169 <210> SEQ ID NO: 18
170 <211> LENGTH: 60
171 <212> TYPE: DNA
172 <213> ORGANISM: artificial sequence
W--> 174 <220> FEATURE:
W--> 174 <223> OTHER INFORMATION:
174 <400> SEQUENCE: 18
175 tccaagccat cagaggggaa ataaagcatc tctacggtgg tcctaaatag tcagcatagt    60
178 <210> SEQ ID NO: 19
179 <211> LENGTH: 60
180 <212> TYPE: DNA
181 <213> ORGANISM: artificial sequence
W--> 183 <220> FEATURE:
W--> 183 <223> OTHER INFORMATION:
183 <400> SEQUENCE: 19
184 actatgctga ctatttagga ccaccgtaga gatgetttat ttccctctctg atggcttgga    60
187 <210> SEQ ID NO: 20
188 <211> LENGTH: 20
189 <212> TYPE: DNA
190 <213> ORGANISM: artificial sequence
W--> 192 <220> FEATURE:
W--> 192 <223> OTHER INFORMATION:
192 <400> SEQUENCE: 20
193 tagtcagcat agtacatttc    20
196 <210> SEQ ID NO: 21
197 <211> LENGTH: 51
198 <212> TYPE: DNA
199 <213> ORGANISM: artificial sequence
W--> 201 <220> FEATURE:
W--> 201 <223> OTHER INFORMATION:
201 <400> SEQUENCE: 21
202 tcgatccgaa ttccgcccgc ctctattgga tcctcgagca gatctgcagc a    51
205 <210> SEQ ID NO: 22
206 <211> LENGTH: 148
207 <212> TYPE: DNA
208 <213> ORGANISM: artificial sequence
W--> 210 <220> FEATURE:
W--> 210 <223> OTHER INFORMATION:
210 <400> SEQUENCE: 22
211 agatgaatca agcttatcga taccgctcag catgcatcta ggtgtccaag ccatcagagg    60
213 ggaaataaag catctctacg gtggtcctaa atagtcagca tagtacattt catctgacta    120
215 atactacaac accaccacca tgaataga    148
218 <210> SEQ ID NO: 23
219 <211> LENGTH: 18
220 <212> TYPE: DNA
221 <213> ORGANISM: artificial sequence
W--> 223 <220> FEATURE:
W--> 223 <223> OTHER INFORMATION:
223 <400> SEQUENCE: 23

```

RAW SEQUENCE LISTING

DATE: 08/29/2000

PATENT APPLICATION: US/09/641,931

TIME: 12:54:49

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292000\I641931.raw

```

224 gagtgggtccg catggtga                                18
227 <210> SEQ ID NO: 24
228 <211> LENGTH: 54
229 <212> TYPE: DNA
230 <213> ORGANISM: artificial sequence
W--> 232 <220> FEATURE:
W--> 232 <223> OTHER INFORMATION:
232 <400> SEQUENCE: 24
233 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggaatt tcgcgattta aatt    54
236 <210> SEQ ID NO: 25
237 <211> LENGTH: 48
238 <212> TYPE: DNA
239 <213> ORGANISM: Sindbis virus
241 <400> SEQUENCE: 25
242 tctgcagcac cactggtcac ggcaatgtgt ttgctcggaa atgtgagc        48
245 <210> SEQ ID NO: 26
246 <211> LENGTH: 16
247 <212> TYPE: PRT
248 <213> ORGANISM: Sindbis virus
250 <400> SEQUENCE: 26
252 Ser Ala Ala Pro Leu Val Thr Ala Met Cys Leu Leu Gly Asn Val Ser
253 1          5          10          15
255 <210> SEQ ID NO: 27
256 <211> LENGTH: 48
257 <212> TYPE: DNA
258 <213> ORGANISM: artificial sequence
W--> 260 <220> FEATURE:
W--> 260 <223> OTHER INFORMATION:
260 <400> SEQUENCE: 27
261 tctgcagcac cactggtcac ggcaatgtgt cggagcggaa atgtgagc        48
264 <210> SEQ ID NO: 28
265 <211> LENGTH: 16
266 <212> TYPE: PRT
267 <213> ORGANISM: artificial sequence
W--> 269 <220> FEATURE:
W--> 269 <223> OTHER INFORMATION:
269 <400> SEQUENCE: 28
271 Ser Ala Ala Pro Leu Val Thr Ala Met Cys Arg Ser Gly Asn Val Ser
272 1          5          10          15
274 <210> SEQ ID NO: 29
275 <211> LENGTH: 44
276 <212> TYPE: DNA
277 <213> ORGANISM: artificial sequence
W--> 279 <220> FEATURE:
W--> 279 <223> OTHER INFORMATION:
279 <400> SEQUENCE: 29
280 gagagagaga gagtttaaac gtcgactttt tttttttttt tttt        44
283 <210> SEQ ID NO: 30
284 <211> LENGTH: 34

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VERIFICATION SUMMARY

DATE: 08/29/2000

PATENT APPLICATION: US/09/641,931

TIME: 12:54:50

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292000\I641931.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:19 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:19 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:28 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:28 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:37 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:37 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:46 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:46 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:55 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:55 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:64 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:64 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:73 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:73 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:82 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:82 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:91 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:91 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:100 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:100 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:109 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:109 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:120 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:120 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:129 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:129 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:138 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:138 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:147 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:147 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:156 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:156 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:165 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:165 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:174 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:174 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:183 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:183 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:192 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:192 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
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L:201 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:210 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:210 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:223 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:223 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

VERIFICATION SUMMARY

DATE: 08/29/2000

PATENT APPLICATION: US/09/641,931

TIME: 12:54:50

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292000\I641931.raw

L:232 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:232 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:260 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:260 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

Raw Sequence Listing Error Summary

#3
09/64/931

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/64/931

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 Misaligned Amino Acid The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.
- 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) . Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
sections for Artificial or Unknown sequences.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES) <210> sequence id number
<400> sequence id number
000
- 10 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 Use of <213>Organism Sequence(s) are missing this mandatory field or its response.
(NEW RULES) 1-24, 27-29 (maybe more)
- 12 Use of <220>Feature Sequence(s) are missing the <220>Feature and associated headings.
(NEW RULES) Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.